## For Research Use Only

# ALDH1B1 Polyclonal antibody

Catalog Number:22220-1-AP 2 Publications



**Basic Information** 

Catalog Number:

22220-1-AP

Concentration:

1000 ug/ml

Source:

Rabbit

GenBank Accession Number:

BC001619

GeneID (NCBI):

219

UNIPROT ID:

R30837

Full Name:
aldehyde dehydrogenase 1 family,
member B1

AG17557 Calculated MW: 517 aa, 57 kDa
Observed MW:

Observed M 55-58 kDa

**Applications** 

Tested Applications: WB, IHC, IF/ICC, ELISA Cited Applications: WB, IHC

Immunogen Catalog Number:

Isotype:

Species Specificity: human, mouse, rat Cited Species: human, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 **Positive Controls:** 

WB: HeLa cells, HepG2 cells, mouse brain tissue, mouse testis tissue, rat brain tissue

**Purification Method:** 

WB: 1:500-1:2000 IHC: 1:500-1:2000

IF/ICC: 1:200-1:800

Antigen affinity purification

Recommended Dilutions:

IHC: human ovary tumor tissue, human colon cancer tissue, human liver tissue, rat kidney tissue

IF/ICC: HepG2 cells, MCF-7 cells

## **Background Information**

Aldehyde dehydrogenases (ALDHs) belong to a superfamily of NAD(P)+-dependent enzymes, which catalyze the oxidation of endogenous and exogenous aldehydes to their corresponding acids. ALDH1B1 is a mitochondrial ALDH that it is dramatically upregulated in human colonic adenocarcinoma, making it a potential biomarker for human colon cancer.(PMID:21216231). ALDH1B1 is a homotetramer expressed in various adult and fetal human tissues including liver, testis, kidney, skeletal muscle, heart, placenta, brain and lung(PMID:18611112). This antibody is specific to ALDH1B1.

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Hao-Long Zeng	29254222	Oncotarget	WB
Tao Zhu	35281423	Transl Cancer Res	IHC

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

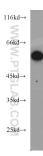
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com W: p

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

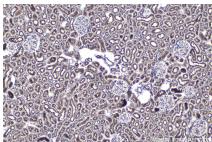
### Selected Validation Data



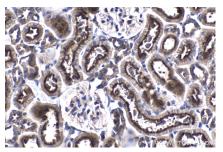
HeLa cells were subjected to SDS PAGE followed by western blot with 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



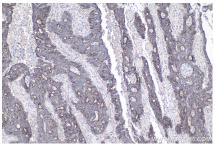
Immunohistochemical analysis of paraffinembedded human liver tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 (under 10x Lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



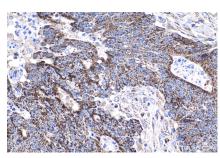
Immunohistochemical analysis of paraffinembedded rat kidney tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



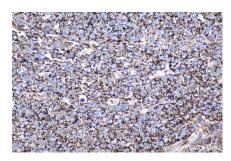
Immunohistochemical analysis of paraffinembedded rat kidney tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



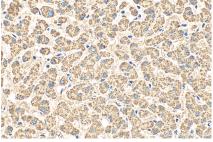
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



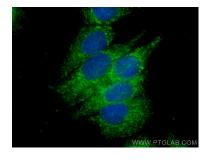
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



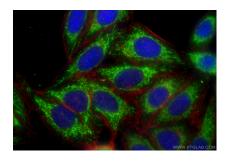
Immunohistochemical analysis of paraffinembedded human ovary tumor tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human liver tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using ALDH1B1 antibody (222201-AP) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using ALDH1B1 antibody (22220-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).